

United States Marine Corps

# Road Map



*The road to success for*  
**Artillery Mechanic**  
**2131 to 2181**



**DRAFT**

# TRAINING AND EDUCATION

## CONTINUUM

### What is a Training and Education (T&E) Continuum?

T&E Continuums were developed to provide a roadmap for the training and education of Marines in their military occupational specialty (MOS). The goal of the T&E Continuum is to develop the best possible Marine, whether it is a first term or career Marine.

### What is a T&E MOS Roadmap?

MOS Roadmaps are just what the name implies - a roadmap through the T&E Continuum from Private through MGySgt/SgtMaj - a roadmap to success in the Marine Corps.

### Do I have to follow the Roadmap?

Yes and no. The roadmap has four major sub-areas:

- Skill Progression (MOS)
- Common Skills & Professional Military Education (PME)
- Billet Progression & Unit Training
- Voluntary Education (VolEd)

Some of the training is mandatory, for example entry-level training (Boot Camp, MCT, MOS School, etc...). Some may be directed by your chain of command and some is voluntary. We recommend you find a mentor that can help you along the way, or you can seek assistance from your OIC/SNCOIC. Roadmaps are a guide, but as always there are several ways to get where you want to go.

### What does the roadmap do for me?

Two things:

1. Provides you a guide to success as a Marine and towards technical mastery.
2. Provides you with an education that will transfer to civilian life when you decide to leave the Marine Corps.

### How do I get started?

You already have. All your training up to this

As we mentioned earlier roadmaps have four major sub-areas that we will briefly explain here.

**Skills Progression Training** is training that will make you a better Marine in your MOS. It is a combination of formal schools, Marine Corps Institute (MCI) courses, National Standard Certification testing, and civilian education that develops your technical proficiency. It is progressive in that you will learn things as you need them and can apply them to your billet and mission.

**Common Skills and PME.** This is training that makes you a better Marine. PME requirements are already well established in the Marine Corps. It consists of resident courses, MCIs and required reading. The Corporal's Course, Sergeant's Course, etc... are not mandatory, but it is important for your career and growth as a leader to attend. These courses are designed to teach you what you need to know to be a Cpl or Sgt, so you should attend as soon as, or before, you are promoted.

### Billet Assignment and Unit

**Training** is hands-on experience; there is no better training. Billet progression provides you with the opportunity to develop by accepting new, more demanding responsibilities and performing new, more difficult tasks. Unit training as prescribed in the Training & Readiness (T&R) manual focuses on the skills you need to accomplish in your MOS that require a collective effort and aids the commander in preparing his unit for combat operations.

**Voluntary Education** was designed to provide you an uncomplicated way to complete a degree while making you a better Marine. The three major considerations of the VolEd roadmap was class availability (especially while deployed), use of free electives, and education required as you progress in rank and billet assignments.

# Private - PFC

**1st**

**Yea  
r**



## SKILL PROGRESSION TRAINING

### ACE Recommended Credit

- Artillery Repair Course <sup>(1)</sup>	(MC-2201-0001)	1
SH Use of Hand Tools		
- MCI (0820) M198 Towed Howitzer <sup>(1)</sup>	(MC-2204-0149)	0
SH		
- Enroll in Uniformed Services Military Apprenticeship		

## COMMON USMAFS (DRAWING) / PME

0 SH

ACE

### Recommended Credit

- Recruit Training <sup>(1)</sup>	(MC-2204-0088)	4 SH	(1)
PhysFit (2) Marksmanship			
Orienteering			
- Marine Combat Training <sup>(1)</sup>	(MC-2204-0105)	3	
SH Military Skills			
- MCI (3420E) Personal Financial Mgmt	(MC-1401-0009)	1	
SH Financial Management			
- MCI (0210B) Terrorism for Marines	(MC-1606-0010)	1	
SH Intro to Terrorism			

## BULLET ASSIGNMENT/UNIT TRAINING

Complete Tan Belt Qualification in MCMAI<sup>(1)</sup> 0 SH

- Complete Military Academic Skills Program (MASP) if required
- Unit training should focus on the collective events established in the Training &

Readiness Manual for this specific grade

## VOLUNTARY EDUCATION

### ACE Recommended

#### Credit

- \* English 101 3 SH English
- \* Computer Science 3 SH Computer Science

\* Denotes college course

<sup>(1)</sup> Denotes Entry-Level Training

### **Credit Tally for:**

## **Applied Science “Technical Studies”**

### **Associates Degree**

Arts and Sciences Electives 30 SH Minimum			Applied Professional 30 SH Maximum a.k.a. (Free Electives)
Humanities	Social Sciences/History	Natural Science/Math	
(3) * English Comp I			(1) Use of Hand Tools (2) Hyd Pneumatics (2) Marksmanship (1) Orienteering (3) Military Skills (1) Finance Mgmt (1) Terrorism (3) * Computer Science
(3) Total	(0) Total	(0) Total	(14) Total

2131 Road Map

# PFC-LCpl

— 2nd Year —



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## SKILL PROGRESSION TRAINING

(ACE Identifier)

### ACE Recommended Credit

- MCI (3515B) Automotive Brakes (MC-1703-0033) 2 SH Hyd/Pneu Brakes
- MCI (2124F) Armory Procedures (MC-1717-0012) 0 SH Complete 1000 hours in USMAP (1000 hours total)

### COMMON SKILLS TRAINING / PME

**ACE**

### Recommended Credit

- MCI (0033) Fundamentals of M.C. Ldrshp SH Supervisory management (MC-1406-0023) 1
- MCI (3316E) Basic Nutrition (MC-1729-0041) 1 SH Nutrition
- Complete Gray Belt Qualification in MCMAP 0 SH

### BILLET ASSIGNMENT / UNIT TRAINING

Read 2 books from the Marine Reading List

- Mechanic with Division, or FSSG unit
- Lance Corporals may apply for Marine Security Guard (MSG) duty as a "watch stander"
- Unit training should focus on the collective events established in the Training & Readiness

Manual for this specific grade

### VOLUNTARY EDUCATION

### ACE Recommended

- \* Speech 101 3 SH Oral
- Communications
- \* Psychology 101 3 SH Psychology
- \* College Algebra 3 SH Math

## Credit Tally for:

## Applied Science "Technical Studies"

### Associates Degree

Arts and Sciences Electives 30 SH Minimum			Applied Professional	
Humanities	Social Sciences/History	Natural Science/Math	30 SH Maximum a.k.a. (Free Electives)	
(3) * English Comp I (3) * Speech	(3) * Psychology	(3) * College Algebra	(1) Use of Hand Tools (2) Hyd Pneumatics (2) Marksmanship (1) Orienteering (3) Military Skills (1) Finance Mgmt (1) Terrorism (3) * Computer Science	(1) Supervisory Mgmt (1) Nutrition
<b>(6) Total</b>	<b>(3) Total</b>	<b>(3) Total</b>	<b>(16) Total</b>	



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# LCpl-Cpl

**—3<sup>rd</sup> Year—**

## SKILL PROGRESSION TRAINING

(ACE Identifier)

### ACE Recommended Credit

- MCI (0410B) MIMMS (MC-1717-0011) 0 SH (2000 hours total)

## COMMON SKILLS TRAINING / PME

### ACE

#### Recommended Credit

- Complete the Corporal's Course (Resident) (MC-1405-0051) 4 SH (3) Management (1) Mil Stud
- MCI (3422A) Basic Pay and Allowances (MC-1401-0016) 1 SH Finance
- MCI (001A) Principles Instruction f/NCOs (MC-1406-0028) 3 SH Instructional Methodology

## BILLET ASSIGNMENT / UNIT TRAINING

- Mechanic with Division Main FSSC Unit
- Read 2 books from the Marine Reading List
- Lance Corporals and Corporals may apply for MSG duty as a "watch stander"
- Unit training should focus on the collective events established in the Training & Readiness Manual for this specific grade

## VOLUNTARY EDUCATION

### ACE Recommended

#### Credit

- \* Intro to Statistics 3 SH Math
- \* US History I 3 SH History
- \* Technical Writing 3 SH English

## Credit Tally for: Applied Science "Technical Studies"

### Associates Degree

Arts and Sciences Electives 30 SH Minimum			Applied Professional	
Humanities	Social Sciences/History	Natural Science/Math	30 SH Maximum a.k.a. (Free Electives)	
(3) * English Comp I (3) * Speech (3) * Tech Writing	(3) * Psychology (3) * History I	(3) * College Algebra (3) * Intro to Statistics	(1) Use of Hand Tools (2) Hyd Pneumatics (2) Marksmanship (1) Orienteering (3) Military Skills (1) Finance Mgmt (1) Terrorism (3) * Computer Science	(1) Supervisory Mgmt (1) Nutrition (3) Management (1) Military Studies (1) Finance (3) Instructional Methods
<b>(9) Total</b>	<b>(6) Total</b>	<b>(6) Total</b>	<b>(24) Total</b>	



# Cpl - Sgt

**4th Year**

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## SKILL PROGRESSION TRAINING

(ACE Identifier)

**ACE**

### Recommended Credit

\* Physical Security

- Complete an additional 1000 hours in USMAP

3 SH Physical Security

(3000 hours total)

## COMMON SKILLS TRAINING / PME

**ACE**

### Recommended Credit

- MCI (8010) Sergeant's DEP (MC-2204-0127)

(2) Mgmt (1) Lang

8 SH (5) Mil Science,

- MCI (028B) Intro to Combat Intelligence (MC-1606-0009)

1 SH

- MCI (0201) Intel Brief: Southwest Asia International Studies (MC-1511-0001)

2 SH

## BULLET ASSIGNMENT / UNIT TRAINING

Complete Green Belt Instructor Course Mechanic with Division, FSSG or I&I unit Instruction

3 SH Martial Arts

Sergeants may apply for MSG, Drill Instructor, Recruiter or Formal School

Read 2 books from the Marine Reading List

Instructor (check

the ACE guide for recommended college credits for these specific special

duty billets)

- Unit training should focus on the collective events established in the Training & Readiness

## MILITARY EDUCATION

\* US History II

**ACE Recommended Credit**

3 SH History

\* Art/Music/Philosophy Elective

3 SH Humanities

\* Physical Science w/lab elective

4 SH Natural Science

## Credit Tally for: Applied Science "Technical Studies" Associates Degree

Arts and Sciences Electives 30 SH Minimum			Applied Professional 30 SH Maximum a.k.a. (Free Electives)	
Humanities	Social Sciences/History	Natural Science/Math		
(3) * English Comp I (3) * Speech (3) * Tech Writing (1) Language (3) * Hum Elective	(3) * Psychology (3) * U.S. History I (3) * U.S. History II (2) International Studies	(3) * College Algebra (3) * Intro to Statistics (4) * N/S Elective	(1) Use of Hand Tools (2) Hyd Pneumatics (2) Marksmanship (1) Orienteering (3) Military Skills (1) Finance Mgmt (1) Terrorism (3) * Computer Science (1) Supervisory Mgmt (1) Nutrition	(3) Management (1) Military Studies (1) Finance (3) Instructional Methods (3) * Physical Security (5) Military Science (2) Management (1) Intelligence (3) Martial Arts Instr
<b>(13) Total</b>	<b>(11) Total</b>	<b>(10) Total</b>	<b>(38) Total</b>	

**\*\*This completes the requirements for an  
Associates in Applied Science "Technical Studies"  
as prescribed a SOCMAR School \*\***



# Sergeant

**5<sup>th</sup>-7<sup>th</sup>**

**Year**

## SKILL PROGRESSION TRAINING

(ACE Identifier)

### ACE Recommended Credit

- MCI (0414A) Grnd Maint Mgmt f/Supers SH Management	(MC-1717-0010)	1
- Ground Ordnance Supervisor's Course SH Gunsmithing	(MC-2204-0110)	3
<b>COMMON SKILLS TRAINING / PME</b>		<b>ACE</b>
- Complete an additional 2000 hours in USMAP total		(5000 hours)
- Attend resident Sergeant's Course SH (2)Ldrshp (3) Mil History	(MC-2204-0103)	5
- MCI (7100) SNCO Career DE P Science (1) Ldrshp	(MC-2204-0139)	4 SH (3) Military
- MCI (8017) Weapons requisite for Sgt's Crs)	(MC-2204-0132)	0 SH (pre-
- MCI (0335C) Infantry Patrolling	(MC-2204-0136)	1 SH Physical

### Billets / ASSIGNMENT / UNIT TRAINING

- MCI (0342G) Operations Guerrilla Units SH Military Science	(MC-2204-0133)	3
- Mechanic with Division, FSSG or I&T unit Sergeants may apply for MSG, Drill Instructor, Recruiter or Formal School Instructor (check Read 4 books per year from the Marine Reading List)		

the ACE guide for recommended college credits for these specific special duty billets)

- Unit training should focus on the collective events established in the Training & Readiness

### VOLUNTARY EDUCATION Credit

ACE Recommended

* Pre-calculus Mathematics	3 SH
* Educational Psychology Psychology	3 SH
* Logistics Engineering	3 UL Logistics
* History Elective	3 UL SH History
* Ethics	3 UL SH Humanities
* Logistics Management	3 UL SH
Logistics	<b>Credit Tally for:</b>
* Organizational Behavior	3 UL SH

Arts and Sciences Electives 60 SH Minimum (21 Upper Level)			Applied Professional 60 SH Maximum (9 Upper Level) a.k.a. (Free Electives)		
Humanities	Social Sciences/History	Natural Science/Math			
(3) * Eng Comp I (3) * Speech (3) * Tech Writing (1) Language (3) * Hum Elective (3) * UL Humanit	(3) * Psychology (3) * U.S. History I (3) * U.S. History II (2) International Studies (3) * Educ Psychology (3) * UL History (3) * UL Psychology	(3) * College Algebra (3) * Intro to Statistics (4) * N/S Elective (3) * Pre-Calculus	(1) Hand Tools (2) Hyd Pneumatics (2) Marksmanship (1) Orienteering (3) Military Skills (1) Finance Mgmt (1) Terrorism (3) * Comp Science (1) Super Mgmt (1) Nutrition	(3) Management (1) Mil Studies (1) Finance (3) Instr Methods (3) * Phys Sec (5) Mil Science (2) Management (1) Intelligence (3) Martial Arts	(1) Management (3) Gunsmithing (2) Leadership (3) Mil History (3) Mil Science (1) Leadership (3) Mil Science (3) * UL Logistics (3) * UL Logistics
<b>(16) Total</b>	<b>(20) Total</b>	<b>(13) Total</b>	<b>(60) Total</b>		

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**8<sup>th</sup>-13<sup>th</sup>**

# **Staff Sergeant**

**Year**



## **SKILL PROGRESSION TRAINING**

**(ACE Identifier)**

**ACE**

### **Recommended Credit**

- MCI (2100) Advanced Supervisor's Course Yet to be developed
- MCI (3412) Field Budget Formulation (MC-1401-0011) 1 SH Finance
- Complete an additional 1000 hours in USMAP (6000 hours total)

### **COMMON SKILLS TRAINING / PME**

**1 SH**

### **Recommended Credit**

- Attend SNCO Career Course (Resident) (MC-2204-0074) 7 SH (6) Mil Stud, (2) Ldrshp

(1) Physical Fitness

### **BILLET ASSIGNMENT / UNIT TRAINING**

Read 2 books per year from the Marine Reading List

- Mechanic with Division, FSSG or I&I unit
- Staff Sergeants may apply for MSG , Drill Instructor, Recruiter or Formal School Instructor

(check the ACE guide for recommended college credits for these specific special duty billets)

- Unit training should focus on the collective events established in the Training & Readiness

### **VOLUNTARY EDUCATION**

### **ACE Recommended Credit**

- Apply for Degree Completion Program and/or continue with the following courses:

* Natural Science Elective	3 UL SH Natural Science
* Business Writing	3 UL SH Language
* Management Elective	3 UL SH Management
* History Elective	3 UL SH Social Science
* Literature Elective	3 UL SH Humanities

## **Credit Tally for: Bachelor of Science/Liberal Arts Degree**

<b>Arts and Sciences Electives 60 SH Minimum (21 Upper Level)</b>			<b>Applied Professional 30 SH Maximum (9 Upper Level)</b>		
Humanities	Social Sciences/History	Natural Science/Math	a.k.a. (Free Electives)		
(3) * Eng Comp I (3) * Speech (3) * Tech Writing (1) Language (3) * Hum Elective (3) * UL Humanities (3) * UL Language (3) * UL Humanities	(3) * Psychology (3) * U.S. History I (3) * U.S. History II (2) International Studies (3) * Educ Psychology (3) * UL History (3) * UL Psychology (3) * UL Soc Sci Ele	(3) * College Algebra (3) * Intro to Statistics (4) * N/S Elective (3) * Pre-Calculus (3) * UL N/S Elective	(1) Hand Tools (2) Hyd Pneumatics (2) Marksmanship (1) Orienteering (3) Military Skills (1) Finance Mgmt (1) Terrorism (3) * Comp Science (1) Super Mgmt (1) Nutrition (3) Management	(1) Mil Studies (1) Finance (3) Instr Methods (3) * Phys Sec (5) Mil Science (2) Management (1) Intelligence (3) Martial Arts (1) Management (3) Gunsmithing (2) Leadership	(3) Mil History (3) Mil Science (1) Leadership (3) Mil Science (3) * UL Logistics (3) * UL Logistics (1) Finance (6) Mil Studies (2) Leadership (3) Mil Science (3) * UL Mgmt
<b>(22) Total</b>	<b>(23) Total</b>	<b>(16) Total</b>	<b>(75) Total</b>		

**\*\*This completes the requirements for a Bachelor of Science/Liberal Arts as prescribed by a SOCMAR School\*\***

# Gunnery Sergeant



13<sup>th</sup>-18<sup>th</sup>  
Year

## SKILL PROGRESSION TRAINING

### ACE Recommended Credit

- Attend Ground Ordnance Chief's Course  
SH Maint Management

(ACE Identifier)

(MC-1717-0008)

3

## COMMON SKILLS TRAINING / PME

### Credit

- Attend the SNCO Advanced Course  
Mil Science (3) Ldrshp
- MCI (7400) War fighting Skills (DEP)  
Military Studies

### ACE Recommended

(MC-2204-0076)

13 SH (7)

(2) Phys Fit (1) Public Speaking  
(MC-2204-0112) 2 SH

## Brief 2 Lookout Document from the Training Readiness List

- Maintenance Chief with Division, FSSG or I&I unit
- Gunnery Sergeants may apply for MSG , Drill Instructor, Recruiter or Formal School Instructor  
(check the ACE guide for recommended college credits for these specific special duty billets)
- Unit training should focus on the collective events established in the Training & Readiness

## VOLUNTARY EDUCATION

### ACE Recommended Credit

- Listed below are the requirements for a Masters of Science in "Management" degree:
- This roadmap has provided the foundation for entry into a Master's Degree Program, this particular program is available on-line with two weekend residency requirements.
- Recommend application to an Advanced Degreed Completion program, however, if not selected, this degree offers the greatest flexibility that we have found.

* Organizational Theory and Behavior Management	6 GL SH
* Human Resource Management	3 GL SH
* Economic Issues in Organizations	3 GL SH
* Organizational Research Management	3 GL SH
* Organizational Management and Leadership I Management	3 GL SH
* Organizational Management and Leadership II Management	3 GL SH
<b>**This completes the requirements for a Masters of Science in Management as prescribed by a SOCMAR School!**</b>	9 GL SH
* Finance and Accounting for Managers Management	1 GL SH
* Professional Leadership Development I (residency) Management	1 GL SH

# Master Sergeant



— 19<sup>th</sup>-22<sup>nd</sup> Year —

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## SKILL PROGRESSION TRAINING

(ACE Identifier)

ACE

### Recommended Credit

- Attend Marine Logistics Education Program (MCLEP)

## COMMON SKILLS TRAINING / PME

ACE

### Recommended Credit

- Attend the 1stSgt & MSgt seminar
- MCI (8510) Amphibious Warfare School (DEP) Phase I  
Mgmt

5 SH (3) Mil Stud (2)

(MC-2204-0113)

- MCI (8600) Amphibious Warfare School (DEP) Phase II  
Stud (2) Mgmt

5 SH UL (3) Mil

(MC-2204-0114)

- Read 2 books per year from the Marine Reading List

## BILLET ASSIGNMENT / UNIT TRAINING

- Ordnance Chief with FSSG, I&I, SOI, Recruit or Logistics Depots
- Special Duty recommendations: Senior Marine Instructor/Chief Instructor at a formal school,

Maintenance Analyst at Marine Corps Logistics Chain Analysis Team,  
Production Chief at

MCCDC or serve as the Occupational Field Monitor

- Unit training should focus on the collective events established in the Training & Readiness

Manual for this specific grade

## VOLUNTARY EDUCATION

ACE Recommended Credit

- Continue to apply for Advanced Degree Completion and/or continue to pursue masters degree.

# Master Gunnery Sergeant



## SKILL PROGRESSION TRAINING

### ACE Recommended Credit

(ACE Identifier)

## COMMON SKILLS TRAINING / PME

### Recommended Credit

ACE

- Attend the SgtMaj & MGySgt Symposium
- Attend Russell Leadership Conference
- MCI (8800) Command & Staff College (DEP) 18 SH UL/GL (3) International Rel

(MC-1408-0025)

(3) Mil Stud (3)

Org Mgmt

(3) Theory of War (3) GL Mil  
(3) GL National Security

History

- Read 2 books per year from the Marine Reading List

## BILLET ASSIGNMENT / UNIT TRAINING

- Ordnance Chief with MEF, FSSG, Division, FMF Pacific or Atlantic
- Special Duty recommendations: Joint Tour
- Unit training should focus on the collective events established in the Training &  
Readiness Manual for this specific grade

## VOLUNTARY EDUCATION

- Continue to apply for Advanced Degree Completion and/or continue to pursue masters degree

2181 Road Map

# **NOTES FOR READING THE ROADMAP**

## **General Information**

1. Formal Military Schools and MCIs are listed in "BLACK".
2. Lower Level college courses (Freshmen/Sophomore) are listed in "BLUE".
3. Upper level (UL) college courses (Junior/Senior) are listed in Green.
4. American Council on Education (ACE) identifiers gives college and career counselors a reference to validate the recommended credits. The credits listed in this roadmap are current as of 16 January 2004. Updates to these can be found on-line at:  
<http://www.militaryguides.acenet.edu>

## **Skill Progression**

1. In addition to MCIs, and Formal MOS schools, certain MOSs can pass national certification testing: National Institute of Metallurgical Society (NIMS) for machinists, Students Excelling through National Standards of Excellence (SENSE) for welders, Automotive Service Excellence (ASE) for mechanics and technicians, etc...
2. Uniformed Services Military Apprenticeship Program (USMAP) is available to most active duty MOSs and is certified by the U.S. Department of Labor. This would qualify you as a journeyman apprentice which could mean a significantly higher starting salary in the civilian work force.

## **Common Skills/PME**

1. This area covers training which is common to all Marines.

## **Billet Assignment/Unit Training**

1. At division assignments you'll be conducting organizational level maintenance and this will give you a good feel for what it takes to fix equipment with limited time and resources.
2. At FSSG and wing assignments you'll

## **Voluntary Education**

1. The voluntary education listed in the roadmap refers specifically to taking college level courses (MCIs and some PME are also " voluntary").
2. The degree program selected in the roadmap is just an example of one you could pursue. Many others are available through the SOCMAR network and can be found at:  
<http://www.soc.aascu.org/socmar/HandbookM.html> In selecting the degree program for each MOS, lots of things were taken into consideration (i.e. availability of courses on-line, residency requirements, or other types of correspondence, campus locations, allowable credit transfers from non-traditional learning such as testing (CLEP/DANTES), and experiential learning.
3. Testing can replace the requirement to attend most of the college courses listed in the roadmap. Base education centers offer CLEP and DANTES tests for active duty military at no cost. Study guides for testing for most of the courses are also available at the education centers.
4. ASE exams are also available at the education centers. DANTES will pay for active duty military to take 3 exams per semi-annual year (every 6 months). The tests are offered in the spring and fall of every year and do require, at present, a \$31.00 non-refundable registration fee. ASE exams require documentation of two years experience working in the automotive industry. (LAV, Tank, AAV, engineer, and MT mechanics usually fall in this category and USMAP can help to document this experience).
5. Tuition assistance (T/A) currently pays for 100% of college course tuition. Students must pay for books and study guides. Tuition rates at most community colleges are much cheaper than for 4 year universities. You should consider taking most of your lower level courses through them as it saves the Marine Corps a tremendous amount of money which can